

15 (amended). In a smoke detector with a smoke detection circuit, an alarm actuatable by the detection circuit and a D.C. power supply with an A.C. input terminal for receiving A.C. power and a D.C. output terminal on which it normally supplies output D.C. power to the detection circuit and alarm whenever it, in turn, is receiving A.C. input power and a back-up battery to provide D.C. power to the detection circuit and the alarm in the event of loss of output D.C. power from the D.C. power supply, the improvement being a supervision circuit for the back-up battery, comprising:

means including a switch connected for disabling said D.C. power supply from providing D.C. output power;

battery connecting means for momentarily electrically connecting the back-up battery through a test load when said D.C. power supply is disabled; and

means for comparing the power capacity of said battery to a preselected [minimum] minimum capacity when it is being electrically connected through said test load.

Third, please amend Claim 16 to read as follows (deletions are shown in [brackets]):

16 (amended). The smoke detector circuit of ^{claim} ~~claim~~ 15 in which [the A.C. input of the power supply, and] said battery connecting means includes a test load switch for connecting the battery with the test load.